WHAT IS CLAIMED IS:

1. A method for modulating cell death in a cell comprising contacting said cell with an Spi2A polypeptide or an Spi2A polypeptide equivalent.

2. The method of claim 1, wherein the cell is contacted with an Spi2A polypeptide.

3. The method of claim 1, wherein the cell is contacted with an Spi2A polypeptide equivalent.

4. The method of claim 3, wherein the Spi2A polypeptide equivalent is a polypeptide from Serpin B1, Serpin B2, Serpin B3, Serpin B4, Serpin B6, Serpin B8, or Serpin B9.

5. The method of claim 4, wherein the Spi2A polypeptide equivalent is a polypeptide from Serpin B9.

6. The method of claim 1, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 to 8 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

7. The method of claim 6, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 to 7 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

8. The method of claim 7, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 to 6 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

9. The method of claim 8, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 6 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

10. The method of claim 8, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 5 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

11. The method of claim 8, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 consecutive amino acid residues from the amino acid sequences MAGVGCCA or FVVAECCM.

12. The method of claim 1, further defined as a method of modulating apoptosis.

13. The method of claim 1, wherein said cell is a T lymphocyte.

14. The method of claim 12, wherein said method is further defined as a method for facilitating the differentiation of said lymphocyte into a memory T lymphocyte.

15. The method of claim 14, further defined as a method of promoting the development of an immune response in a subject against a target cell.

16. The method of claim 1, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is comprised in a vaccine.

17. The method of claim 15, wherein the target cell is a tumor cell or a cell that is infected by a pathogen.

18. The method of claim 17, wherein the tumor cell is a cell from a breast cancer, lung cancer, ovarian cancer, brain cancer, liver cancer, cervical cancer, colon cancer, renal cancer, skin cancer, head & neck cancer, bone cancer, esophageal

cancer, bladder cancer, uterine cancer, lymphatic cancer, stomach cancer, pancreatic cancer, testicular cancer, lymphoma, or leukemia.

19. The method of claim 17, wherein the pathogen is a virus.

20. The method of claim 19, wherein the virus is HIV, HSV, or ADV.

21. The method of claim 12, wherein said apoptosis is apoptosis due to increased lysosomal permeability in said cell.

22. The method of claim 21, wherein said increased lysosomal permeability results in release of at least one lysosomal protease within said cell.

23. The method of claim 22, wherein said lysosomal protease is a cysteine protease.

24. The method of claim 23, wherein said cysteine protease is cathepsin B, cathepsin H, cathepsin L, cathepsin S, cathepsin C, cathepsin K, cathepsin O, cathepsin F, cathepsin V, cathepsin X, or cathepsin W.

25. The method of claim 1, further defined as a method of modulating autophagic cell death.

26. The method of claim 1, further defined as a method of modulating TNF-α – mediated cell death.

27. The method of claim 1, further defined as a method of modulating cell death due to reactive oxygen species within said cell.

28. The method of claim 1, further defined as a method of modulating cell death due to necrosis.

29. The method of claim 1, wherein said cell is in a subject.

30. The method of claim 29, wherein said subject is a human.

31. The method of claim 30, wherein said human is a patient with an infection.

32. The method of claim 31, wherein the infection is an infection due to a gram negative bacteria, a gram positive bacteria, or a fungus.

33. The method of claim 31, wherein the infection is an infection due to a biological weapon.

34. The method of claim 33, wherein the infection due to a biological weapon is *Bacillus anthracis* or *Yersinia pestis*.

35. The method of claim 30, wherein said human is a patient with septic shock.

36. The method of claim 30, wherein said human is a patient with hepatic failure.

37. The method of claim 36, wherein the hepatic failure is fulminating hepatic failure.

38. The method of claim 37, wherein the fulminating hepatic failure is caused by hepatitis A virus, hepatitis B virus, hepatitis C virus, hepatitis D virus, hepatitis E virus, hepatitis G virus, anti-tuberculosis drugs, anti-depressant drugs, industrial chemicals, or alcohol.

39. The method of claim 30, wherein said human is a patient with an inflammatory disease.

40. The method of claim 39, wherein the inflammatory disease is liver disease.

41. The method of claim 40, wherein the liver disease is hepatitis or liver cirrhosis.

42. The method of claim 40, wherein the liver disease is caused by hepatitis A virus, hepatitis B virus, hepatitis C virus, hepatitis D virus, hepatitis E virus, hepatitis G virus, an anti-tuberculosis drug, an anti-depressant drug, an industrial chemical, or alcohol.

43. The method of claim 42, wherein the anti-tuberculosis drug is rifamycin or isoniazid.

44. The method of claim 42, wherein the anti-depressant drug is a monoamine oxidase inhibitor.

45. The method of claim 42, wherein the industrial chemical is carbon tetrachloride.

46. The method of claim 30, wherein said human is a patient with vascular disease.

47. The method of claim 46, wherein said vascular disease is occlusive vascular disease.

48. The method of claim 46, wherein said vascular disease is cardiovascular disease.

49. The method of claim 48, wherein said cardiovascular disease further comprises a myocardial infarction.

50. The method of claim 30, wherein said human is a patient with cancer.

51. The method of claim 30, wherein said human is a patient with a bone disease.

52. The method of claim 51, wherein the bone disease is osteoporosis.

53. The method of claim 30, wherein said human is a patient with emphysema.

54. The method of claim 30, wherein said human is a patient with a neurodegenerative disease.

55. The method of claim 54, wherein said neurodegenerative disease is Alzheimer disease.

56. The method of claim 30, wherein said human is a patient with a viral infection.

57. The method of claim 56, wherein said viral infection is AIDS.

58. The method of claim 30, wherein said human is a patient with an immune disorder.

59. The method of claim 58, wherein said immune disorder is an autoimmune disorder.

60. The method of claim 58, wherein said immune disorder is a disorder associated with abnormal antigen presentation.

61. The method of claim 30, wherein said human is a patient with multiple sclerosis.

62. The method of claim 30, wherein said human is a patient with muscular dystrophy.

63. The method of claim 30, wherein said human is a patient with arthritis.

64. The method of claim 63, wherein said patient with arthritis is a patient with rheumatoid arthritis.

65. The method of claim 63, wherein said patient with arthritis is a patient with osteoarthritis.

66. The method of claim 30, wherein said human is a patient undergoing secondary anti-hyperplastic therapy.

67. The method of claim 66, wherein said secondary anti-hyperplastic therapy is chemotherapy, radiotherapy, immunotherapy, phototherapy, cryotherapy, toxin therapy, hormonal therapy or surgery.

68. The method of claim 1, wherein said Spi2A polypeptide or Spi2A polypeptide equivalent further comprises a polypeptide encoding an amino acid TAT sequence from HIV.

69. The method of claim 1, wherein said Spi2A polypeptide or Spi2A polypeptide equivalent further comprises a polypeptide encoding an Antp amino acid sequence.

70. The method of claim 1, wherein said Spi2A polypeptide or Spi2A polypeptide equivalent further comprises a polypeptide encoding a VP22 amino acid sequence from HSV.

71. The method of claim 1, wherein said Spi2A polypeptide or said Spi2A polypeptide equivalent further comprises an expression cassette comprising a promoter active in said cell, operably linked to a polynucleotide encoding an Spi2A polypeptide or an Spi2A polypeptide equivalent.

72. The method of claim 71, wherein the expression cassette comprises a promoter active in said cell, operably linked to a polynucleotide encoding an Spi2A polypeptide.

73. The method of claim 71, wherein said expression cassette comprises a promoter active in said cell, operably linked to a polynucleotide encoding an Spi2A polypeptide equivalent.

74. The method of claim 73, wherein the Spi2A polypeptide equivalent is a polypeptide from Serpin B1, Serpin B2, Serpin B3, Serpin B4, Serpin B6, Serpin B8, or Serpin B9.

75. The method of claim 74, wherein the Spi2A polypeptide equivalent is a polypeptide from Serpin B9.

76. The method of claim 71, wherein said expression cassette is carried in a viral vector.

77. The method of claim 76, wherein said viral vector is an adenoviral vector, a retroviral vector, an adeno-associated viral vector, a vaccinia viral vector, or a pox viral vector.

78. The method of claim 71, wherein said expression cassette is carried in a nonviral vector.

79. The method of claim 78, wherein said nonviral vector is a liposome.

80. The method of claim 71, wherein the promoter is a constitutive promoter, an inducible promoter or a tissue-specific promoter.

81. The method of claim 71, wherein said expression cassette further comprises an origin of replication.

82. The method of claim 71, wherein said expression cassette further comprises a polyadenylation signal.

83. The method of claim 71, wherein said expression cassette further comprises a selectable marker gene.

84. The method of claim 1, wherein said Spi2A polypeptide or said Spi2A polypeptide equivalent is obtained from media of cultured cells and applied to the surface of said cell.

85. The method of claim 84, wherein said cultured cells comprise an expression cassette comprising a promoter active in said cell, operably linked to a polynucleotide encoding an Spi2A polypeptide or an Spi2A polypeptide equivalent.

86. The method of claim 85, wherein said expression cassette is carried in a viral vector.

87. The method of claim 86, wherein said viral vector is an adenoviral vector, a retroviral vector, an adeno-associated viral vector, a vaccinia viral vector, or a pox viral vector.

88. The method of claim 85, wherein said expression cassette is carried in a nonviral vector.

89. The method of claim 88, wherein said nonviral vector is a liposome.

90. The method of claim 85, wherein the promoter is a constitutive promoter, an inducible promoter or a tissue-specific promoter.

91. A method of treating a subject comprising:

(a) providing a composition comprising:

(1) an Spi2A polypeptide or an Spi2A polypeptide equivalent; and

(2) a pharmaceutical preparation suitable for delivery to said subject; and

(b) administering said composition to said subject.

92. The method of claim 91, wherein the composition comprises an Spi2A polypeptide.

93. The method of claim 91, wherein the composition comprises an Spi2A polypeptide equivalent.

94. The method of claim 91, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 to 8 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

95. The method of claim 94, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 to 7 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

96. The method of claim 95, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 to 6 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

97. The method of claim 95, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 6 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

98. The method of claim 95, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 5 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

99. The method of claim 95, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 consecutive amino acid residues from the amino acid sequences MAGVGCCA or FVVAECCM.

100. The method of claim 93, wherein the Spi2A polypeptide equivalent is a polypeptide from Serpin B1, Serpin B2, Serpin B3, Serpin B4, Serpin B6, Serpin B8, or Serpin B9.

101. The method of claim 100, wherein the Spi2A polypeptide equivalent is a polypeptide from Serpin B9.

102. The method of claim 91, further defined as a method of modulating cell death in a subject.

103. The method of claim 91, further defined as a method of modulating apoptotic cell death in a subject.

104. The method of claim 103, further defined as a method of facilitating the differentiation of memory T lymphocytes wherein the memory T lymphocytes are directed against a diseased cell in the subject.

105. The method of claim 91, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is comprised in a vaccine.

106. The method of claim 104, wherein the diseased cell is a tumor cell or a cell that is infected by a pathogen.

107. The method of claim 106, wherein the tumor cell is a cell from a breast cancer, lung cancer, ovarian cancer, brain cancer, liver cancer, cervical cancer, colon cancer, renal cancer, skin cancer, head & neck cancer, bone cancer, esophageal cancer, bladder cancer, uterine cancer, lymphatic cancer, stomach cancer, pancreatic cancer, testicular cancer, lymphoma, or leukemia.

108. The method of claim 106, wherein the pathogen is a virus.

109. The method of claim 108, wherein the virus is HIV, HSV, or ADV.

110. The method of claim 91, further defined as a method of modulating cell death due to necrosis in a subject.

111. The method of claim 91, further defined as a method of treating septic shock.

112. The method of claim 91, further defined as a method of treating hepatic failure.

113. The method of claim 112, wherein the hepatic failure is fulminating hepatic failure.

114. The method of claim 113, wherein the fulminating hepatic failure is caused by hepatitis A virus, hepatitis B virus, hepatitis C virus, hepatitis D virus, hepatitis E virus, hepatitis G virus, anti-tuberculosis drugs, anti-depressant drugs, industrial chemicals, or alcohol.

115. The method of claim 91, further defined as a method of treating an inflammatory disease.

116. The method of claim 115, wherein the inflammatory disease is liver disease.

117. The method of claim 116, wherein the liver disease is hepatitis or liver cirrhosis.

118. The method of claim 116, wherein the liver disease is caused by hepatitis A virus, hepatitis B virus, hepatitis C virus, hepatitis D virus, hepatitis E virus, hepatitis G virus, an anti-tuberculosis drug, an anti-depressant drug, an industrial chemical, or alcohol.

119. The method of claim 118, wherein the anti-tuberculosis drug is rifamycin or isoniazid.

120. The method of claim 118, wherein the anti-depressant drug is a monoamine oxidase inhibitor.

121. The method of claim 118, wherein the industrial chemical is carbon tetrachloride.

122. The method of claim 91, further defined as a method of treating cardiovascular disease.

123. The method of claim 122, wherein the cardiovascular disease is a myocardial infarction.

124. The method of claim 123, wherein the myocardial infarction is an acute myocardial infarction.

125. The method of claim 91, further defined as a method of treating emphysema.

126. The method of claim 91, further defined as a method of treating a neurodegenerative disorder.

127. The method of claim 126, wherein the neurodegenerative disorder is Alzheimer disease.

128. The method of claim 126, wherein the neurodegenerative disorder is multiple sclerosis.

129. The method of claim 91, further defined as a method of treating an infection in a subject.

130. The method of claim 129, wherein the infection is a viral infection.

131. The method of claim 130, wherein the viral infection is a HIV-related disease.

132. The method of claim 91, further defined as a method of treating an immune disorder in a subject.

133. The method of claim 132, wherein the immune disorder is an autoimmune disease.

134. The method of claim 132, wherein the immune disorder is a disease associated with abnormal antigen presentation.

135. The method of claim 91, further defined as a method of treating osteoporosis.

136. The method of claim 91, further defined as a method of treating arthritis in a subject.

137. The method of claim 136, wherein the arthritis is rheumatoid arthritis.

138. The method of claim 136, wherein the rheumatoid arthritis is osteoarthritis.

139. The method of claim 91, further defined as a method of treating a disease associated with excessive cysteine protease activity in a subject.

140. The method of claim 91, further defined as a method of treating a bone disease in a subject.

141. The method of claim 91, further defined as a method of treating cancer in a subject.

142. The method of claim 141, wherein said cancer is breast cancer, lung cancer, prostate cancer, ovarian cancer, brain cancer, liver cancer, prostate cancer, cervical cancer, colon cancer, renal cancer, skin cancer, head & neck cancer, bone cancer, esophageal cancer, bladder cancer, uterine cancer, lymphatic cancer, stomach cancer, pancreatic cancer, testicular cancer, lymphoma, or leukemia.

143. The method of claim 91, wherein said subject is a human.

144. The method of claim 91, wherein said composition is delivered systemically.

145. The method of claim 91, wherein said composition is delivered intravascularly.

146. The method of claim 91, wherein said composition is delivered locally to a tumor mass.

147. The method of claim 91, wherein said Spi2A polypeptide or said Spi2A polypeptide equivalent further comprises a polypeptide encoding an amino acid TAT sequence from HIV.

148. The method of claim 91, wherein said Spi2A polypeptide or said Spi2A polypeptide equivalent further comprises a polypeptide encoding an Antp amino acid sequence.

149. The method of claim 91, wherein said Spi2A polypeptide or said Spi2A polypeptide equivalent further comprises a polypeptide encoding a VP22 amino acid sequence from HSV.

150. The method of claim 91, wherein said composition further comprises an expression cassette comprising a promoter active in cells of said subject, operably linked to a polynucleotide encoding an Spi2A polypeptide or an Spi2A polypeptide equivalent.

151. The method of claim 150, wherein said expression cassette is carried in a viral vector.

152. The method of claim 151, wherein said viral vector is an adenoviral vector, a retroviral vector, an adeno-associated viral vector, a vaccinia viral vector, or a pox viral vector.

153. The method of claim 150, wherein said expression cassette is carried in a nonviral vector.

154. The method of claim 153, wherein said nonviral vector is a liposome.

155. The method of claim 150, wherein the promoter is a constitutive promoter, an inducible promoter or a tissue-specific promoter.

156. The method of claim 150, wherein said expression cassette further comprises an origin of replication.

157. The method of claim 150, wherein said expression cassette further comprises a polyadenylation signal.

158. The method of claim 150, wherein said expression cassette further comprises a selectable marker gene.

159. The method of claim 141, wherein said subject is a subject undergoing secondary anti-hyperplastic therapy.

160. The method of claim 159, wherein said secondary anti-hyperplastic therapy is chemotherapy, radiotherapy, immunotherapy, phototherapy, cryotherapy, toxin therapy, hormonal therapy or surgery.

161. A method of preparing donor granulocytes for delivery to a subject in need of a granulocyte donation, comprising:

(a) obtaining donor granulocytes from a suitable donor;

(b) isolating said donor granulocytoes;

(c) contacting said donor granulocytes with a composition comprising an Spi2A polypeptide or an Spi2A polypeptide equivalent and a pharmaceutical preparation suitable for delivery of said donor granulocytes; and

(d) administering said donor granulocytes to a subject in need of said donor granulocytes.

162. The method of claim 161, further comprising treatment of the donor with C-GSF prior to obtaining granulocytes from the donor.

163. The method of claim 161, further comprising purifying the granulocytes by leukapheresis following isolation of the granulocytes.

164. The method of claim 161, wherein said composition comprises an Spi2A polypeptide.

165. The method of claim 161, wherein said composition comprises an Spi2A polypeptide equivalent.

166. The method of claim 161, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 to 8 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

167. The method of claim 166, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 to 7 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

168. The method of claim 167, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 to 6 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

169. The method of claim 168, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 6 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

170. The method of claim 168, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 5 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

171. The method of claim 168, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 consecutive amino acid residues from the amino acid sequences MAGVGCCA or FVVAECCM.

172. The method of claim 165, wherein the Spi2A polypeptide equivalent is a polypeptide from Serpin B1, Serpin B2, Serpin B3, Serpin B4, Serpin B6, Serpin B8, or Serpin B9.

173. The method of claim 172, wherein the Spi2A polypeptide equivalent is a polypeptide from Serpin B9.

174. The method of claim 161, wherein said method of preparing donor granulocytes results in reduction of apoptosis of said donor granulocytes.

175. The method of claim 161, wherein said subject is a subject with neutropenia.

176. The method of claim 175, wherein said neutropenia is neutropenia due to chemotherapy, radiotherapy, myelosuppressive drugs, leukema, aplastic anemia, or idiopathic neutropenia.

177. The method of claim 175, wherein said subject with neutropenia is a subject with sepsis.

178. The method of claim 161, wherein said subject is a subject with a qualitative abnormality of neutrophils.

179. The method of claim 178, wherein said qualitative abnormality of neutrophils is chronic granulomatous disease.

180. The method of claim 161, wherein said composition further comprises an expression cassette comprising a promoter, active in cells of said subject, operably linked to a polynucleotide encoding a Spi2A polypeptide or an Spi2A polypeptide equivalent.

181. The method of claim 180, wherein the composition comprises an expression cassette comprising a promoter active in cells of said subject, operably linked to a polynucleotide encoding an Spi2A polypeptide.

182. The method of claim 180, wherein the composition comprises an expression cassette comprising a promoter, active in cells of said subject, operably linked to a polynucleotide encoding an Spi2A polypeptide equivalent.

183. The method of claim 182, wherein the Spi2A polypeptide equivalent is a polypeptide from Serpin B1, Serpin B2, Serpin B3, Serpin B4, Serpin B6, Serpin B8, or Serpin B9.

184. The method of claim 180, wherein said polynucleotide encoding said Spi2A polypeptide or said Spi2A polypeptide equivalent is comprised in a vaccine.

185. The method of claim 161, wherein said Spi2A polypeptide or said Spi2A polypeptide equivalent further comprises a polypeptide encoding an amino acid TAT sequence from HIV.

186. The method of claim 161, wherein said Spi2A polypeptide or said Spi2A polypeptide equivalent further comprises a polypeptide encoding an Antp amino acid sequence.

187. The method of claim 161, wherein said Spi2A polypeptide or said Spi2A polypeptide equivalent further comprises a polypeptide encoding a VP22 amino acid sequence from HSV.

188. A method of preparing donor granulocytes for storage, comprising:

(a) obtaining donor granulocytes from a suitable donor;

(b) isolating said donor granulocytoes;

(c) contacting said donor granulocytes with a composition comprising an Spi2A polypeptide or an Spi2A polypeptide equivalent and a pharmaceutical preparation suitable for delivery of said donor granulocytes; and

(d) storing said donor granulocytes.

189. The method of claim 188, further comprising treatment of the donor with C-GSF prior to obtaining granulocytes from the donor.

190. The method of claim 189, further comprising purifying the granulocytes by leukapheresis following isolation of the granulocytes.

191. The method of claim 188, wherein said composition comprises an Spi2A polypeptide.

192. The method of claim 188, wherein said composition comprises an Spi2A polypeptide equivalent.

193. The method of claim 188, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 to 8 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

194. The method of claim 193, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 to 7 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

195. The method of claim 194, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 to 6 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

196. The method of claim 195, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 6 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

197. The method of claim 195, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 5 consecutive amino acid residues of the amino acid sequences MAGVGCCA or FVVAECCM.

198. The method of claim 195, wherein the Spi2A polypeptide or Spi2A polypeptide equivalent is a polypeptide comprising 4 consecutive amino acid residues from the amino acid sequences MAGVGCCA or FVVAECCM.

199. The method of claim 192, wherein the Spi2A polypeptide equivalent is a polypeptide from Serpin B1, Serpin B2, Serpin B3, Serpin B4, Serpin B6, Serpin B8, or Serpin B9.

200. The method of claim 199, wherein the Spi2A polypeptide equivalent is a polypeptide from Serpin B9.

201. The method of claim 188, wherein said method of storing donor granulocytes results in reduction of apoptosis of said donor granulocytes.

202. The method of claim 188, wherein said Spi2A polypeptide or said Spi2A polypeptide equivalent further comprises a polypeptide encoding an amino acid TAT sequence from HIV.

203. The method of claim 188, wherein said Spi2A polypeptide or said Spi2A polypeptide equivalent further comprises a polypeptide encoding an Antp amino acid sequence.

204. The method of claim 188, wherein said Spi2A polypeptide or said Spi2A polypeptide equivalent further comprises a polypeptide encoding a VP22 amino acid sequence from HSV.